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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/312,073	05/13/1999	MINORU USUI	448563/163	2072
26610	7590	11/30/2005	EXAMINER	
STROOCK & STROOCK & LAVAN LLP 180 MAIDEN LANE NEW YORK, NY 10038			NGHIEM, MICHAEL P	
			ART UNIT	PAPER NUMBER
			2863	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

09/312,073

Applicant(s)

USUI ET AL.

Examiner

Michael P. Nghiem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.  
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-23, 36-39, 42-65, 68-73, 83-90, 92, 93, 95-101, 103 and 106-133 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 11-14, 36-39, 42-57, 62-65, 68-73, 83-90, 92, 93, 95-101, 103 and 106-133 is/are allowed.  
 6) ☒ Claim(s) 15, 19, 20, 23 and 58 is/are rejected.  
 7) ☒ Claim(s) 16-18, 21, 22 and 59-61 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) ☐ Notice of Informal Patent Application (PTO-152)  
 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

The Amendment filed on September 9, 2005 has been acknowledged.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 19, 20, 23, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inada et al. (US 6,164,769) in view of Haigo (US 6,257,710).

Regarding claims 15 and 58, Inada et al. discloses an ink cartridge (Figs. 9-12) for an ink jet printer (101), comprising:

- a housing (1) having walls (walls of 1) and an opening (top opening of 1 without top wall, Fig. 12), said housing containing ink (ink cartridge, Abstract, line 1), a top wall (top wall of 1) of said housing being constituted by a lid (top wall of 1) covering said opening of said housing (Fig. 12);

- at least one ink chamber (chamber of 1) defined by said housing and said lid (Fig. 9); an ink supply port (2) formed on one of the walls of said housing (Fig. 9);

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- at least one recess (recess on top wall of 1, Fig. 12) forming a space in an outer surface of said lid when the ink cartridge is packed (Fig. 10),
- a seal member (4) adhered to the outer surface of said lid,
- wherein said recess does not communicate with an interior of the ink cartridge, and is exposed to an exterior of the ink cartridge when the seal member is adhered to the outer surface of said lid (Fig. 11).

Regarding claim 19, Inada et al. discloses that the ink jet printer includes a carriage (110), the cartridge being mounted in the carriage (Fig. 25) and said recess is disposed on a part of said lid which is engageable with a member of the carriage when the ink cartridge is mounted on the carriage (recess is a rib recess) (see Okazaki et al., US 6,179,415, Figs. 5's).

Regarding claim 20, Inada et al. discloses the ink jet printer further includes a mounting lever mounted on the carriage wherein the member of the carriage comprises a projection projecting from the mounting lever (Fig. 25).

Regarding claim 20, Inada et al. discloses a print head (Abstract, line 2) including a plurality of nozzles through which ink is ejected mounted on said carriage (Fig. 25).

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However, regarding claim 15 and 58, Inada et al. not disclose that the ink cartridge being packed under a vacuum condition, the pressure within said space being lower than the atmospheric pressure when the ink cartridge is packed.

Nevertheless, Haigo discloses an ink cartridge being packed under a vacuum condition (column 1, lines 13-14) for the purpose maintaining a small volume package.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Inada et al. with a vacuum packaging as disclosed by Haigo for the purpose of maintaining a small volume package.

***Allowable Subject Matter***

Claims 16-18, 21, 22, and 59-61 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 11-14, 36-39, 42-57, 62-65, 68-73, 83-90, 92, 93, 95-101, 103, and 106-133 are allowed.

### ***Reasons For Allowance***

The **combination** as claimed wherein said recess is partially covered by said seal member adhered onto the outer surface of said lid (claims 16, 59) or at least one recess forming in an outer surface of the lid not communicating with the interior and a fine, circuitous groove formed in one surface of said lid (claim 22) or a projection projecting from the mounting lever is engageable with said recess (claim 60) is not disclosed, suggested, or made obvious by the prior art of record.

Reasons for allowance for the other claims have already been indicated.

### ***Response to Arguments***

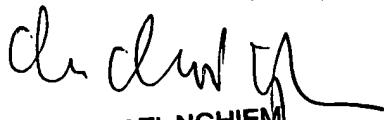
Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-H.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL NGHIEM  
PRIMARY EXAMINER

Michael Nghiem

November 22, 2005